

Remarks

Reconsideration of this Application is respectfully requested. Upon entry of the foregoing amendment, claims 1-57 are pending in the application, with claims 1, 9, and 18 being the independent claims. Claims 1, 9, and 18 are sought to be amended. New claims 52-57 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested. Based on the following remarks, Applicants respectfully request the Examiner reconsider and withdraw all outstanding rejections.

Examiner Interview

The Applicant and his representatives thank the Examiner for courtesies extended during the interview conducted on August, 15, 2006. During the interview, Applicants' representatives and the Examiner generally discussed the pending claims and the Office Action. In particular, Applicants' representatives and the Examiner discussed European Patent No. 1006697 to Azadet *et al.* and support for pending claims 1, 9, and 18.

Rejections under 35 U.S.C. § 112

In paragraph 2 of the Office Action, the Examiner rejected claims 1-51 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. According to the Examiner, there is no support for the feature, "1/s, where s is an integer greater than one," as recited in independent claims 1, 9, and 18. Applicant respectfully traverses.

As discussed in the Examiner Interview, the feature:

wherein $M=kN$ and k is one of an integer greater than one and $1/s$, where s is an integer greater than one,

as recited in independent claims 1, 9, and 18, is another way of reciting that M does not equal N . Support for this feature can be found at, for example, paragraph 109 of the specification, which reads in part:

In an example embodiment, $M=N=4$ (i.e., $k=1$). Other embodiments use other values for N , M , and k .

In other words, in other embodiments, k is not equal to one, and M is thus not equal to N . Additional support for this feature can be found at, for example, paragraphs 115 and 130, and FIGS. 10B and 10G. Accordingly, independent claims 1, 9, and 18 have been amended to recite, "wherein M is not equal to N ."

Reconsideration and withdrawal of the rejection is requested.

Rejections under 35 U.S.C. § 103

In paragraph 5 of the Office Action, the Examiner rejected claims 1-42 under 35 U.S.C. § 103(a), as being unpatentable over Azadet *et al.* (EP 1006697) in view of Winter *et al.* (Electrical Signal Processing Techniques in Long-Haul, Fiber-Optic Systems, AT&T Bell Laboratories).

In paragraph 6 of the Office Action, the Examiner rejected claims 43-51 under 35 U.S.C. § 103(a), as being unpatentable over Azadet in view of Winter, and further in view of Bingham (Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come, IEEE Communication Magazine, May 1990).

Applicant respectfully traverses.

In paragraph 7 of the Office Action, the Examiner explicitly declined to consider the feature, "wherein M is not equal to N ." According to the Examiner:

[I]t is noted that the features upon which applicant relies ($M \neq N$) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

As discussed above with respect to the rejection under 35 U.S.C. § 112, independent claims 1, 9, and 18, have been amended to explicitly recite, "wherein M is not equal to N ."

As discussed in the Examiner Interview, neither Azadet, Winter, nor Bingham teach or suggest, alone or in combination with one another, "wherein M is not equal to N ." Reconsideration and withdrawal of the rejection of claims 1-51 is requested.

New Claims

New claims 52-57 recite disclosed embodiments where M is not equal to N. Support for new claims 52-57 can be found at, for example, paragraphs 109, 115, and 130 of the specification, and FIGS. 10B and 10G. Examination of new claims 52-57 is requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests the Examiner reconsider and withdraw all presently outstanding rejections.

Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Patrick E. Garrett
Attorney for Applicants
Registration No. 39,987

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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